



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX

75 Hawthorne Street
San Francisco, CA 94105

Via Electronic Mail and U.S. Postal Service Mail
Certified Mail Receipt No. 7008 1830 0002 6279 5295

January 4, 2011

Mark M. Smith
Vice President, COO
Tyco Thermal Controls, Inc.
307 Constitutional Drive
Menlo Park, CA 94205

Re: Polychlorinated Biphenyls (PCBs) Under Toxic Substances Control Act – USEPA Conditional Approval Under 40 CFR 761.61(a) and (c) of PCB Cleanup Notification and Work Plan¹ Dated June 14, 2010 for Tyco Thermal Controls, 2201 Bay Road, Redwood City, California

Dear Mr. Smith:

The U.S. Environmental Protection Agency Region 9 (USEPA) hereby approves with conditions the above referenced Tyco Thermal Controls Inc. (TTCI) Notification for cleanup of polychlorinated biphenyls (PCBs) at their former Tyco Thermal Controls facility (Tyco Site) located at 2201 Bay Road, Redwood City, California. USEPA received the Notification on June 15, 2010, which was submitted by AMEC Geomatrix, Inc. (AMEC) on behalf of TTCI. Subsequent to receiving the Notification, USEPA notified AMEC that TTCI's Notification did not include the certification required in 40 CFR 761.61(a)(3) and the Notification was incomplete. Therefore, the 30-day time frame required under 40 CFR 761.61(a)(3) for USEPA to respond to the Notification was waived due to an incomplete Notification.

During the June 15, 2010 meeting with TTCI, AMEC Geomatrix, and the San Francisco Bay Regional Water Quality Control Board (SFB RWQCB), USEPA requested important revisions to the TTCI PCB Cleanup Notification including (1) additional soil sampling, (2) a demonstration that characterization sampling had been conducted with an adequate number of samples, (3) an estimate of the number of concrete samples that would be collected to characterize concrete for off-site and on-site disposal, and (4) a physical barrier to separate soils between the northern boundary of the Tyco Site and the railroad spur property (owned by a party different than TTCI). USEPA is approving the TTCI Notification as amended by AMEC and TTCI on October 5, 2010² and with the conditions established in Section C of the enclosed approval.

¹ "PCB Cleanup Notification and Work Plan Tyco Thermal Controls 2201 Bay Road, Redwood city, California" Submitted to: Tyco Thermal Controls, Redwood City, California. Submitted by AMEC Geomatrix, Inc., Oakland, California, June 14, 2010

² Electronic mail message from Peischl, Peggy (AMEC Geomatrix) to Carmen Santos (USEPA R9) dated October 5, 2010 (sent at 05:03 PM) and transmitting "Appendix D (Revised) Review of Soil Sampling Program For PCBs Tyco Thermal Controls 2201 Bay Road, Redwood City, California," "Appendix E (Revised) Concrete Sampling Plan for PCBs Tyco Thermal Controls 2201 Bay Road Redwood City, California," a July 19, 2010 letter Gary R. Foote, PG (AMEC Geomatrix Inc.) to Carmen D. Santos (Subject: Certification for PCB Cleanup Notification and Work Plan), and a July 15, 2010 memorandum from Mark M. Smith serving as TTCI's Certification under 40 CFR 761.61(a)(3).

Mark M. Smith
Re: USEPA Conditional Approval – TSCA PCB Cleanup
Former Tyco Thermal Couples Facility
Date: January 4, 2011

The Redwood City Planning Department has zoned the area where the Tyco Site is located as industrial restricted (IR). This zoning code is described in Article 17 – IR (Industrial Restricted) of the Redwood City Zoning Code. Item G under Section 17.2 (Permitted Uses) of Article 17 permits “[f]amily child care homes, within residential structures, in accordance with the provisions of Section 39.3....” Item C under Section 17.3 (Accessory Uses) permits “[c]hild care centers if the facilities are in conjunction with adjoining businesses and primarily serve the employees of such businesses....” AMEC Geomatrix and TTIC have indicated that “... the highest and best use for the Site will be the construction of a building for office use/research and development.”³

In light of the above, USEPA explains that industrial scenarios considered in developing risk-based screening levels for environmental media do not encompass uses such as child care facilities. TTIC is proposing a PCB cleanup level of 0.74 mg/kg. This proposed cleanup level coincides with USEPA’s industrial soil screening level (SSL) of 0.74 mg/kg PCBs, which is equivalent to a 1×10^{-6} health risk level (based on Aroclors 1254 and 1260) for industrial land use. Sensitive populations such as children were not considered in the assumptions used to develop the referenced SSL for PCBs in an industrial land use scenario. Considering the information provided in the above paragraph, USEPA requires that either soils at the Tyco Site be cleaned up to 0.22 mg/kg PCBs which is USEPA’s SSL for residential use; or to 0.74 mg/kg if a restrictive covenant that runs with the land is recorded in accordance with California state law that excludes the use of the property or any portion thereof for child care facilities.

TTIC submitted the PCB Cleanup Notification under 40 CFR 761.61(a). USEPA is approving the cleanup, cleanup verification sampling, and disposal of PCB remediation waste under 40 CFR 761.61(a). USEPA is approving the PCB cleanup level and additional site characterization under 40 CFR 761.61(c).

The TTIC Notification is modified by USEPA’s conditions of approval and some of those conditions include:

- PCB cleanup level for soils and concrete is 0.22 mg/kg PCBs instead of 0.74 mg/kg unless TTIC records a restrictive covenant that runs with the Tyco Site limiting its use to only industrial purposes. In that event, USEPA is providing as an alternative to the 0.22 mg/kg PCB cleanup level the initially contemplated 0.74 mg/kg level.
- Decontamination requirements for sampling equipment and tools.
- Installation of a subsurface physical barrier (e.g., filter fabric) on the northern boundary of the Tyco Site adjacent to the railroad spur property (owned by a different party) to separate Tyco Site soils subject to TSCA cleanup from PCB-contaminated soils in the railroad spur property.
- Submission of a sampling and analysis plan covering additional soil and concrete characterization sampling and cleanup verification sampling.

This conditional approval applies only to the cleanup of PCBs at the former Tyco Site at 2201 Bay Road, Redwood City, California. Other contaminants (e.g., 1,4-dichlorobenzene, and 1,2,4-trichlorobenzene) are present at the Site and cleanup of those contaminants is being addressed by the San Francisco Bay Regional Water Quality Control Board under Section 13267 of the California Water Code.

³ December 21, 2010 electronic message from Peischl, Peggy (AMEC Geomatrix) to Carmen Santos (USEPA) received at 02:09 PM.

Mark M. Smith
Re: USEPA Conditional Approval – TSCA PCB Cleanup
Former Tyco Thermal Couples Facility
Date: January 4, 2011

We look forward to be of assistance during TTIC's implementation of the approved PCB Cleanup Notification and Work Plan as modified by USEPA's conditions of approval. Please call Carmen D. Santos at 415.972.3360 if you have any questions concerning this conditional approval.

Sincerely,

Arlene Kabei
Associate Director
Waste Management Division

Enclosures (2)

Cc: Katherine (Peggy) Peischl, AMEC Geomatrix Inc.
Ed Firestone, Esquire
David Barr, SFB RWQCB
Steve Armann, USEPA R9
Carmen Santos, USEPA R9

MAIL CODE	CWST-5	Arman				
SURNAME	CSantos	WST5				
DATE	01042011	1/4/11				

U.S. EPA CONCURRENCES

OFFICIAL FILE COPY

1/4/11



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

January 4, 2011

**USEPA Conditional Approval for Former Tyco Thermal Couples
2201 Bay Road, Redwood City
TSCA PCB Cleanup Under 40 CFR 761.61(a) and 761.61(c)**

A. Introduction

The U.S. Environmental Protection Agency Region 9 (USEPA) hereby approves with conditions the "*PCB Cleanup Notification and Work Plan Tyco Thermal Controls 2201 Bay Road, Redwood City, California*" dated June 14, 2010 (Notification)¹ for cleanup of polychlorinated biphenyls (PCBs) at the former Tyco Thermal Controls facility (Tyco Site) in Redwood City, California. Tyco Thermal Controls, Inc. (TTCI) currently owns the Tyco Site, and submitted the Notification to USEPA. This approval is effective on the date of this enclosure. Section C below contains the conditions of approval.

Any party cleaning up PCBs from soils and structures must do so consistent with the requirements set forth at 40 CFR 761.61. The TSCA PCB regulations in 40 CFR 761.61 establish PCB cleanup options consisting of self-implementing (40 CFR 761.61(a)), performance-based (40 CFR 761.61(b)), or risk-based (40 CFR 761.61(c)) cleanup alternatives. Depending on site-specific factors, USEPA may approve and require implementation of a PCB cleanup following a hybrid approach that applies requirements from multiple cleanup options such as this approval for the Tyco Site.

USEPA is approving the Notification under the Toxic Substances Control Act (TSCA) regulatory requirements for PCBs in 40 CFR 761.61(a) (self-implementing cleanup) and (c) (risk-based cleanup). This approval requires additional characterization sampling for soils and concrete under 40 CFR 761.61(c). This approval requires cleanup of PCBs and removal and offsite disposal of PCB remediation waste (PCB contaminated soils and concrete) in accordance with the requirements in 40 CFR 761.61(a). Cleanup of PCBs will be achieved via excavation of PCB contaminated soils at the Tyco Site and offsite disposal of these soils with PCBs above the USEPA approved PCB cleanup level; and offsite disposal of concrete contaminated with PCBs.

B. Former Tyco Thermal Controls, Inc. Facility (Tyco Site) Land Use, Potential Sources of Contamination, TTCI Cleanup Plan, and Demolition of Structures at the Tyco Site

- 1. Land Use.** The Redwood City Planning Department has zoned the area where the Tyco Site is located as industrial restricted (IR). This zoning code is described in Article 17 – IR (Industrial Restricted) of the Redwood City Zoning Code. Item G under Section 17.2 (Permitted Uses) of Article 17 permits "[f]amily child care homes, within residential structures, in accordance with the provisions of Section 39.3...." Item C under Section 17.3 (Accessory Uses) permits "[c]hild care centers if the facilities are in conjunction with adjoining businesses and primarily serve the employees of such businesses...." AMEC Geomatrix

¹"*PCB Cleanup Notification and Work Plan Tyco Thermal Controls 2201 Bay Road, Redwood City, California*" Submitted to: Tyco Thermal Controls, Redwood City, California. Submitted by AMEC Geomatrix, Inc., Oakland, California, June 14, 2010.

and TTIC have indicated that "... the highest and best use for the Site will be the construction of a building for office use/research and development."² The Tyco Site, currently owned by TTCI, is vacant and is approximately 2.5 acres and the manufacturing building (constructed in 1950) is approximately 72,000 square feet.

2. **Potential Sources of PCB Contamination.** According to the Notification, during TTCI ownership, uses of the Tyco facility or Site included office space, storage, and electronics assembly and packaging; and before TTCI ownership, historical operations at the Site included electronic wire and transformer manufacturing. TTCI purchased the Site from Raychem. Before Raychem the site was owned by Hills Magnetics. The predominant PCB Aroclors at the Tyco Site are Aroclors 1248, 1254, and 1260.
3. **TTCI Proposed PCB Cleanup as Modified by USEPA's Conditions of Approval.** TTCI shall follow the proposed cleanup plan provided for in its Notification, as modified by Section C (below), which includes the following steps among others:
 - PCB cleanup activities will be conducted after demolition of existing structures at the Site is completed.
 - The approved cleanup level is 0.22 mg/kg PCBs. An alternate cleanup level is provided for in Section C (Conditions of Approval).
 - Removal of the concrete slab associated with the manufacturing building at the Tyco Site; and pavement (e.g., asphalt if present).
 - Additional soil and concrete characterization sampling following an approved sampling and analysis plan (required in this approval).
 - Sampling and analysis plan covering additional soil and concrete characterization sampling and cleanup verification sampling.
 - Soil cleanup verification sampling and analysis.
 - Excavation of PCB contaminated soils above the approved PCB cleanup level for soils and concrete.
 - Installation or construction of a physical barrier (to be proposed) that serves as a physical separation between soils at the northern boundary of the Tyco Site and the adjacent railroad spur property.
 - PCB Cleanup Report for USEPA approval.
 - Restrictive covenant recorded in accordance with state law if the alternate cleanup level is chosen by TTCI.
4. **Demolition of Structures at the Tyco Site.** On December 22, 2010 TTCI submitted to USEPA the "*Decommissioning and Demolition Plan Tyco Thermal Controls 2201 Bay Road, Redwood City, California*" that it submitted to San Mateo County Environmental Health Services Division. TTCI seeks USEPA's approval for PCB decontamination procedures that will be implemented inside the 71,000 square foot manufacturing building located at the Tyco Site. TTCI is proposing PCB decontamination procedures under 40 CFR 761.79(h) for USEPA approval. USEPA is addressing the approval of those procedures in a separate letter, hopefully to be issued by USEPA at the end of January 2011.

² December 21, 2010 electronic message from Peischl, Peggy (AMEC Geomatrix) to Carmen Santos (USEPA) received at 02:09 PM.

C. USEPA's Conditions of Approval

This conditional approval does not relieve the owner from complying with all other applicable federal, state, and local regulations and permits. Departure from the approval conditions without prior written permission from USEPA may result in the commencement of proceedings to revoke this approval, and / or an enforcement action. Nothing in this approval bars USEPA from imposing penalties for violations of this approval or for violations of other applicable TSCA PCB requirements or for activities not covered under this approval.

This approval only applies to the Tyco Site. USEPA reserves the right to require additional characterization and / or cleanup of PCBs at the Tyco Site if new information shows that PCBs remain in at this Site above the approved PCB cleanup level or if PCBs are found at other areas of the Tyco Site not investigated for PCBs.

USEPA is hereby approving the TTCI Notification as modified by the following conditions of approval and TTCI must implement the Notification as modified by these conditions.

1. **PCB Cleanup Level.** The cleanup level for soils and concrete at the Tyco Site is 0.22 mg/kg PCBs. TTCI may choose to cleanup PCBs at the Site to 0.74 mg/kg PCBs if after completion of the PCB cleanup TTCI records in accordance with state law a restrictive covenant that runs with the land and excludes the use of the property or any portion thereof for child care facilities. USEPA is approving the PCB cleanup level for the Tyco Site under 40 CFR 761.61(c).

In light of Section B.1 above, USEPA explains that industrial scenarios considered in its development of risk-based screening levels for environmental media do not encompass uses such as child care facilities. TTCI is proposing a PCB cleanup level of 0.74 mg/kg. This proposed cleanup level coincides with USEPA's industrial soil screening level (SSL) of 0.74 mg/kg PCBs, which is equivalent to a 1×10^{-6} health risk level (based on Aroclors 1254 and 1260) for industrial land use. Sensitive populations such as children were not considered in the assumptions used to develop the referenced SSL for PCBs in an industrial land use scenario. Considering the information provided in Section B.1 above, USEPA requires that either soils at the Tyco Site be cleaned up to 0.22 mg/kg PCBs, which is USEPA's SSL for residential use; or to 0.74 mg/kg if a restrictive covenant that runs with the land is recorded in accordance with California state law that excludes the use of the TTCI property or any portion thereof for child care facilities.

2. **Sampling and Analysis Plan.** Within 45 days after the date of this approval, TTCI must submit a Sampling and Analysis Plan (SAP) for USEPA approval that includes the information described below. The SAP is subject to USEPA's approval under 40 CFR 761.61(c).
 - a. A description of all samples to be collected under this approval.
 - b. A table summarizing additional soil characterization sampling as well as sampling of the concrete slab for characterization before disposal. The summary table must include the media (e.g., soil, concrete) being sampled, type (discrete or composite) and number of samples to be collected for additional soil and concrete characterization, location of samples referencing associated sample identification codes, analytes (e.g., Aroclor 1254), sampling methods, PCB extraction method, laboratory analysis method, quality control (QC) samples, analytical detection limits, and pre-analysis sample extract cleanup procedures.

- c. A table summarizing the soil cleanup verification samples to be collected to demonstrate PCBs in soils do not exceed the USEPA approved cleanup level. The type and number of samples, associated sample identification codes, location of samples, analytes, sampling methods, quality control samples, analytical detection limits, and pre-analysis sample extract cleanup procedures. The SAP must explain if cleanup verification sampling will be conducted following the requirements in 40 CFR 761.61(a)(6)(i) or if different sampling procedures will be implemented.
 - d. The sampling grid that TTCI will use for collection of concrete core samples from the 72,000 square foot manufacturing building slab. If pavement is present at the Site, the same information for collecting samples of pavement that may be present at the Site.
 - e. A description of quality control (QC) procedures that will be implemented during sample collection and number and type of QC samples that will be collected in the field during the soil and concrete sampling events.
 - f. The SAP must meet the requirements in Approval Condition 3.
3. **Extraction and Analytical Methods.** Under the TSCA PCB regulations the applicant has the option to choose either the Soxhlet extraction method (USEPA Method 3540C) or the Ultrasonic method (USEPA Method 3550C). If the Ultrasonic method is chosen, TTCI must submit the laboratory's Standard Operating Procedure for our review within 45 days after the date of this approval. If necessary, post extraction and pre-analysis sample cleanup (e.g., USEPA Methods 3665A [sulfuric acid], 3620C [florisil column], 3640A [GPC]) procedures should be considered if matrix interferences are suspected that could increase analytical method detection limits and compromise comparisons of analytical results to cleanup and/or decontamination levels required in this approval.
4. **TTCI Notification, "Appendix E (Revised) Concrete Sampling Plan for PCBs," revised October 2010.** Subsection 5.2 in the initial Notification (Concrete Slab Testing and Removal) was superseded by the October 2010 revised version of Appendix E ([Revised] Concrete Sampling for PCBs). USEPA is approving the revised Appendix E with the conditions established below. USEPA is approving Appendix E under 40 CFR 761.61(c).
- a. Concrete sampling procedures; type, location, and number of samples; field quality control samples and analytical methods must be included in the SAP required in Condition 2 above.
 - b. Sampling of concrete must be conducted following the "Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)," USEPA New England Region 1, May 9, 2008. The concrete sampling maximum depth is 0.5 inches. Depending on the PCB analysis results, additional concrete samples should be taken at deeper depths to further characterize the concrete for disposal.
 - c. Decontamination of movable equipment, tools, and sampling equipment (including drill bits) must be conducted in accordance with the requirements in Approval Condition 9.
 - d. Waste disposal must be conducted in accordance with the requirements in Approval Condition 10.
5. **TTCI Notification, "Appendix D (Revised) Review of Soil Sampling Program for PCBs," revised October 2010, Conclusions and Recommendations.** Subsection 5.3 (Additional Soil Investigation) was superseded by the October 2010 revised version of Appendix D ([Revised] Review of Soil Sampling Program for PCBs). USEPA is approving the number and location of additional soil characterization samples discussed in Appendix D with the conditions established below. USEPA is approving the additional soil characterization sampling under 40 CFR 761.61(c).

USEPA Conditional Approval Under TSCA, 40 CFR 761.61(a) and (c)
Tyco Thermal Controls Site in Redwood City, California
Date: January 4, 2011

- a. The details of additional soil sampling and analysis must be included in the SAP as required in Condition 2, above.
 - b. Table A-23 (Summary of Analytical Results for Groundwater – PCBs) in the Notification shows detections of PCBs in ground water in samples collected on March 10, 2005. In sampling location ET-1, PCB Aroclor 1254 was detected at 67 ug/L. In sampling location ET-9, PCB Aroclors 1254 and 1260 were detected at 65 ug/L and 46 ug/L, respectively. As reference, the maximum contaminant level for PCBs in drinking water is 0.5 ug/L. Ground water is found at 6.5 to 9.1 feet below ground surface and flows to the northwest, toward the San Francisco Bay.
 - c. The additional soil characterization must include collection of soil samples near sampling locations ET-1 and ET-9 (mentioned above) if soil samples have not been collected already at or near these two locations. Within 30 days after the date of this approval either confirm if soil samples have been collected from sampling locations ET-1 and ET-9 and the PCB results; or submit a table summarizing the additional soil characterization that will be conducted at the Tyco Site and that includes soil samples in immediate proximity of or at sampling locations ET-1 and ET-9.
 - d. Additional soil characterization samples must be collected during removal of the concrete slab and removal of concrete, asphalt, and/or asphalt concrete pavement from areas at the Tyco Site where this pavement may be present if odors, stained, oily, and/or discolored soils are observed.
6. **TTCI Notification, Section 5.0, Implementation of Selected Remedial Alternative for Soil, several Subsections.** USEPA will address TSCA approvals relevant to Section 5.1 (Demolition of Existing Structures) of the Notification when it completes its review of the *“Decommission and Demolition Plan Tyco Thermal Controls”* that TTCI submitted to USEPA at the December 22, 2010 meeting with TTCI and its consultants.
- In connection with Subsection 5.5 (Permits), TTCI must abide by all relevant and applicable federal, state, and local regulations and acquire all relevant and applicable permits that allow the PCB cleanup work to proceed. In reference to Subsection 5.7 (Construction Sequencing), the PCB cleanup must be conducted after completion of demolition and removal of demolition waste from the Tyco Site.
- This approval also modifies Subsection 5.11.3 (Soil Excavation) of the Notification. See Approval Conditions 2, 4, 5, 7, and 8. Subsection 5.11.4 (Loading, Off-Haul, and Soil Disposal), 5.11.5 (Excavation Backfill), and 5.11.6 (Site Restoration) are modified by Approval Conditions 8, 9 and 10. Regarding Subsection 5.11.6 (Site Restoration), within 14 days after the date of this approval confirm if all existing asphalt and concrete pavement, asphalt surface course, and / or asphalt concrete will be completely removed from the Tyco Site. See Approval Condition 5 in reference to Subsection 5.11.6 of the Notification. For TSCA reporting purposes, Subsection 5.11.7 (Implementation Report) is modified by Approval Condition 13.
7. **Cleanup Verification Sampling.** See Approval Condition 2 above. TTCI must demonstrate that cleanup levels for PCBs have been achieved via cleanup verification sampling and analysis for PCB Aroclors and dioxin-like PCB congeners. This Condition modifies Subsection 5.11.3 of the Notification by deleting the sentence: “The lateral extent of most of the proposed excavation has been defined based on previous soil investigations, and post-excavation confirmation samples will be [sic] not required except for three areas.” The verification sampling described in Subsection 5.11.3 is not approved. Verification sampling must be

described in detail in the SAP requested in Approval Condition 2, which is subject to future USEPA approval.

8. **Green Remediation Best Management Practices: Clean Fuel and Emission Technologies for Site Cleanup.** USEPA recommends that applicable green remediation best management practices in the attached "*Green Remediation Best Management Practices: Clean Fuel & Emission Technologies for Site Cleanup*," USEPA Office of Superfund Remediation and Technology Innovation, August 2010 (EPA 542-F-10-008) be implemented, as feasible, during the PCB cleanup activities (e.g., excavation, and other activities requiring use of heavy equipment) at the Tyco Site and during transportation of PCB waste from the Site to offsite disposal or recycling facilities.
9. **Decontamination of Movable Equipment, Tools, and Sampling Equipment.** Decontamination of movable equipment, sampling tools, and equipment must be conducted in accordance with the self-implementing decontamination procedures in 40 CFR 761.79(c)(2). Disposal of decontamination waste and residues must be consistent with the requirements in 40 CFR 761.79(g). Approval Condition 9 modifies all relevant parts (e.g., Subsection 5.11.4) of the Notification discussing decontamination of movable equipment, tools, and/ or sampling equipment. Proper decontamination of movable equipment such as waste hauling trucks (mentioned in Subsection 5.11.4) must be properly decontaminated before leaving the Tyco Site to prevent tracking of potentially PCB contaminated soils into public roadways.
10. **PCB Waste Disposal.** Concrete contaminated with PCBs above the approved PCB cleanup level must be disposed as bulk PCB remediation waste in accordance with the requirements in 40 CFR 761.61(a)(5)(i)(B)(2)(ii), (a)(5)(v)(A), and (a)(5)(i)(B)(2)(iii). Disposal of water (including ground water that may intrude soil excavation areas must be consistent with the requirements in 40 CFR 761.61(a)(5)(iv). Cleanup wastes (e.g., personal protective equipment [PPE], non-liquid materials such as rags, gloves, booties, other disposable PPE) must be disposed in accordance with 40 CFR 761.61(a)(5)(v). Disposal of all wastes (e.g., personal protective equipment, soils, concrete) generated during cleanup of PCBs must be in compliance with all applicable federal, state, and local regulations.
11. **Installation of Subsurface Physical Barrier.** USEPA requires installation of a subsurface physical barrier to separate Tyco Site soils in the north boundary of the Site from potentially PCB-contaminated soils in the adjacent railroad spur property (not owned by TTCI). Within 45 days after the date of this approval, TTCI must propose the type of subsurface barrier that will be installed.
12. **Restrictive Covenant.** USEPA requires that either soils at the Tyco Site be cleaned up to 0.22 mg/kg PCBs, which is USEPA's SSL for residential use; or to 0.74 mg/kg if a restrictive covenant that runs with the land is recorded in accordance with California state law that excludes the use of the TTCI property or any portion thereof for child care facilities (see Redwood City, California Zoning, Article 17, Sections 17.2 [Permitted Uses] and 17.3 [Accessory Uses]). Within 120 days after USEPA's approval of the PCB cleanup report, TTCI must record the restrictive covenant in accordance with state law. USEPA must approve of the language in the covenant. This covenant is being required under 40 CFR 761.61(c).
13. **PCB Cleanup Report.** Within 60 days after TTCI completes cleanup verification sampling at the Site, TTCI must submit a PCB cleanup report for USEPA approval (under 40 CFR 761.61(c)) that includes all relevant data and justifications demonstrating that TTCI achieved the USEPA approved PCB cleanup

USEPA Conditional Approval Under TSCA, 40 CFR 761.61(a) and (c)
Tyco Thermal Controls Site in Redwood City, California
Date: January 4, 2011

level at the Tyco Site. At a minimum, TTCI should address in the PCB cleanup report the reporting requirements in 40 CFR 761.125(c)(5).

D. Not Covered by this Approval

1. The engineering design in Subsection 5.4 (Engineering Design) of the Notification has not been received yet and therefore it is not covered by this approval.
2. This approval does not cover approval of the Health and Safety Plan(s) referenced in Subsection 5.8 (Health and Safety) of the Notification.
3. This approval does not cover Sections 5.9 (Construction Management and Oversight), 5.10 (Temporary Facilities and Controls), and 5.11.2 (Shoring Installation) of the Notification.